

Date: Tuesday, 3/20/2007 1:53:15 PM
 User: Kim Johnston

Process Sheet

| | | | |
|-----------------------|--|------------------|-------------------------------|
| Customer | : CU-DAR001 Dart Helicopters Services | Drawing Name | : AFT X-TUBE EXT HEIGHT(-013) |
| Job Number | : 31378 | | |
| Estimate Number | : 10563 | | |
| P.O. Number | : <i>N/A</i> | Part Number | : D205596107 |
| This Issue | : 3/20/2007 S.O. No. : <i>N/A</i> | Drawing Number | : D205596107 |
| Prsht Rev. | : NC | Project Number | : N/A |
| First Issue | : <i>N/A</i> Type : LANDING GEAR | Drawing Revision | : A |
| Previous Run | : 29704 | Material | : <i>N/A</i> |
| Written By | : _____ | Due Date | : 4/15/2007 Qty: 1 Um: Each |
| Checked & Approved By | : <i>07.03.20</i> | | |
| Comment | : Est Rev: 05.03.21 Added bending procedure KJ/JLM | | |

Additional Product

Job Number:



| | | |
|---------|-----------------------|---------------|
| Seq. #: | Machine Or Operation: | Description : |
|---------|-----------------------|---------------|

| | | |
|-----|----|------------------|
| 1.0 | DC | DOCUMENT CONTROL |
|-----|----|------------------|



Comment: DOCUMENT CONTROL

Photocopy D205-594 bluefile & type labels per PPP D205-596-107CHG001.

KS 07.04.03

| | | |
|-----|-------|---------------|
| 2.0 | D2890 | Aft Crosstube |
|-----|-------|---------------|



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part number Description Batch

1 D2890 Aft Crosstube *31369*

| | | |
|-----|----------------|-------------------------|
| 3.0 | LANDING GEAR 1 | LANDING GEAR RESOURCE 1 |
|-----|----------------|-------------------------|



Comment: LANDING GEAR RESOURCE 1

Mark 29.8" for cutting from tangential line in the straight section from D2890 as per Dwg wall template.

AS per Dwg.
07.04.11

| | | |
|-----|------|------------------------------|
| 4.0 | QC15 | DIMENSIONAL CHECK OF X-TUBES |
|-----|------|------------------------------|



Comment: DIMENSIONAL CHECK OF X-TUBES

07.04.11

| | | |
|-----|----------------|-------------------------|
| 5.0 | LANDING GEAR 1 | LANDING GEAR RESOURCE 1 |
|-----|----------------|-------------------------|



Comment: LANDING GEAR RESOURCE 1

1-Cut as per Dwg D205-596-107 *07.04.11*

2-Deburr & Inspect for surface damage. Polish cut surface. Scribe part # and batch # on one end of tube.

JD 7-4-12

| W/O: | | WORK ORDER CHANGES | | | | | | |
|----------|------|--|----|------|-----|-------------------------------------|--------------------------------|--|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector | |
| 07-04-11 | 3.0 | Mark cut lines AS per Doug Leight. Perm. Change. <i>[Signature]</i> | | | | <i>[Signature]</i> 07-04-11 | <i>[Signature]</i> 07-04-11 | |
| | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: AFT X-TUBE EXT HEIGHT(-013)

Job Number: 31378

Part Number: D205596107

Job Number:



Seq. #:

Machine Or Operation:

Description:

6.0

~~QC5~~ QCS

DIMENSIONAL CHECK OF X-TUBES

Be



Comment: DIMENSIONAL CHECK OF X-TUBES

DR 7-4-12

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Touch up ends of the tube with Chemical Conversion Coat per QSI 005 4.1

JD 7-4-12

8.0

SPRAY PAINTING

SPRAY PAINTING



Comment: SPRAY PAINTING

1-Prime inside and outside with Immron per QSI 005 4.2

ml 07 04 12

(1)

9.0

QC14

Inspect Spray Paint



Comment: Inspect Spray Paint

207-04-13 @

10.0

D2856600

Abrasion Strip



Comment: Qty.: 1.6810 f(s)/Unit Total : 1.6810 f(s)

Pick:

Qty Part number

Description

Batch

2 D2856-600(10.09") Abrasion Strip

26650 25 07 04-13

11.0

D29401

Support



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part number

Description

Batch

2 D2940-1

Support

25594 25 07-04-12

12.0

MS2192028

Clamp(per MIL-DTL-8783C)



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part number

Description

Batch

4 MS21920-28

Clamp

102534 25 07-04-12

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 09/04/19

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

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Job Number: 31378

Part Number: D205596107

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Install abrasion strips per QSI 035 position using DT8582. Install supports and clamps per Dwg D205-596-107. Torque clamps to 80-100 in lb. Seal edges of support using Sikaflex

25 07-04-17

A/R Sikaflex -291

Expiry date:

N/A

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

2070417@

15.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D205-596-107

Location:

PPP Rev:

C

2070418@

16.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

2070419@

Job Completion



2070418

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

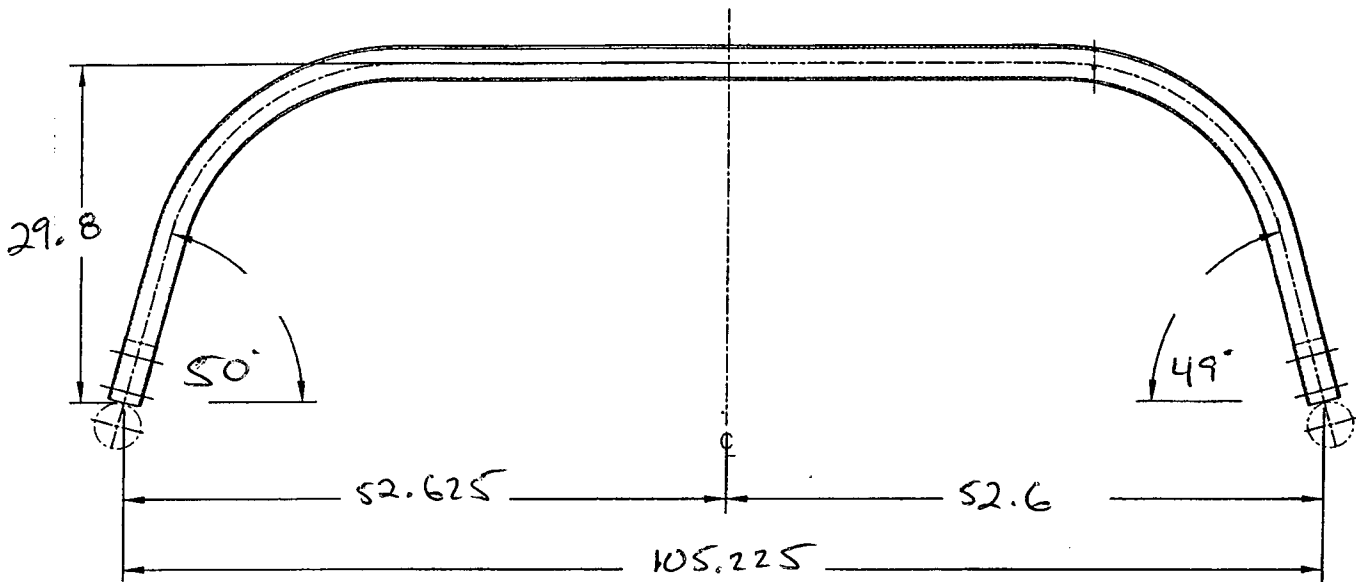
QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
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NOTE: Date & initial all entries

| | | | |
|--------------------------------------|--|--------------|--------------|
| DART AEROSPACE LTD | | Work Order: | 31378 |
| Description: Crosstube High-High Aft | | Part Number: | D205-596-107 |
| Inspection Dwg: D205-596-107 Rev: A | | Page 1 of 1 | |

| Required Dimension | Min | Max |
|--------------------|-------|-------|
| Height | 29.7 | 29.9 |
| 1/2 Span | 52.4 | 52.6 |
| Angle | 49 | 52 |
| Total Span | 104.8 | 105.2 |

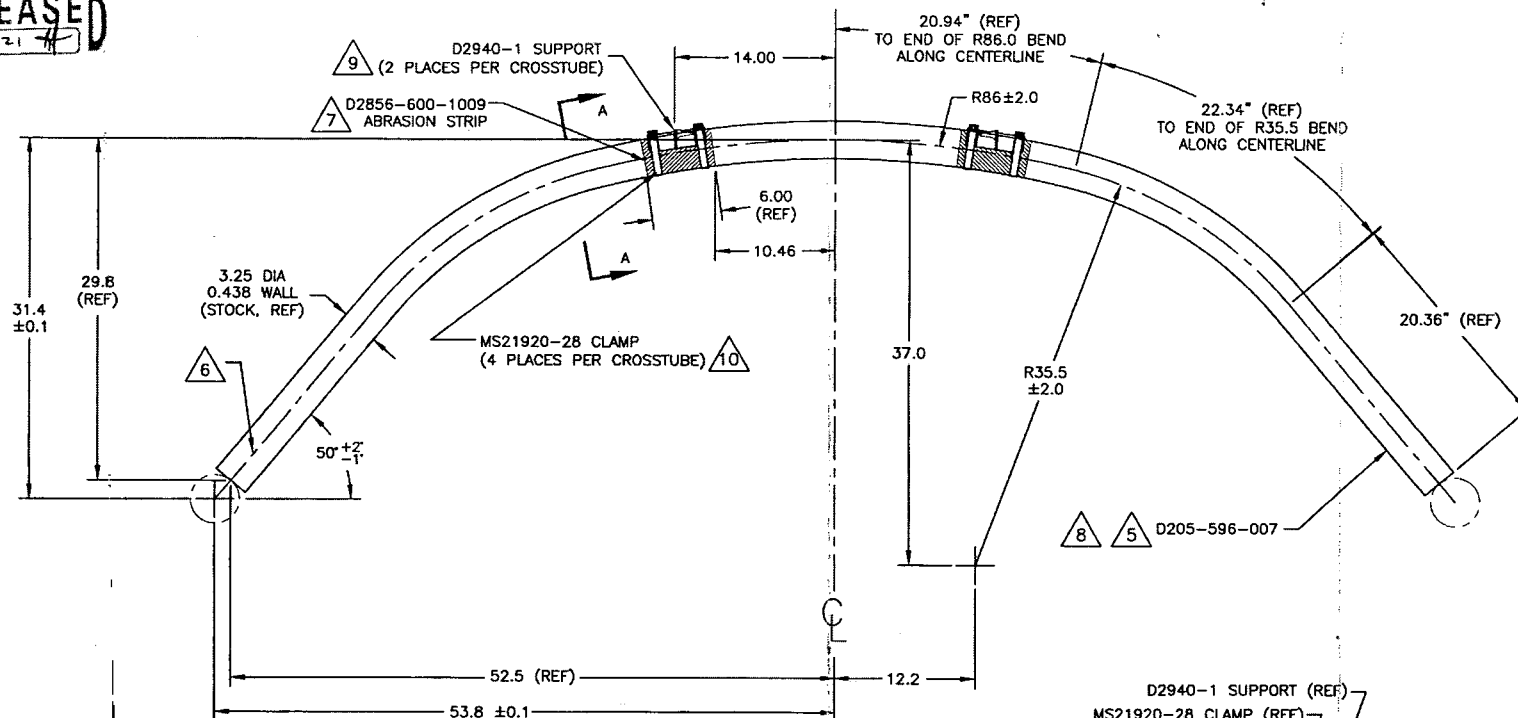


| Comments |
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|-----------------|----------|
| QC15 Inspection | 2 AS1012 |
| Date | 0704.11 |

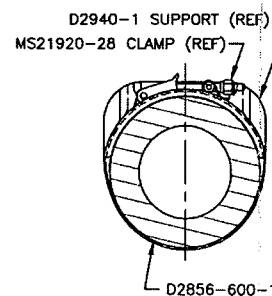
| Rev | Date | Change | Revised by | Approved |
|-----|----------|-----------|------------|--------------------|
| A | 07.02.06 | New Issue | KJ/JM | <i>[Signature]</i> |

RELEASED



GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) MATERIAL: MANUFACTURE FROM D6008-180
FINISHED LENGTH = 127.28
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) BEND PROGRESSIVELY WITH A MINIMUM OF 3 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 6) SCRIBE DART PART NUMBER AND BATCH NUMBER IN THIS AREA WITH VIBRATING STYLUS
- 7) INSTALL D2856-600-1009 ABRASION STRIP WITH A 0.13 (REF) GAP ON BOTTOM SIDE OF CROSSTUBE, CENTERED OPPOSITE D2940-1 SUPPORT, PER QSI 035
- 8) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 9) SEAL EDGES OF SUPPORTS USING SIKAFLEX-241/-291 SEALANT (OPTIONAL)
- 10) TORQUE CLAMPS 80 TO 100 IN-LB



| | | | | |
|--|----------|----------|------------------------|---|
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| DESIGN | ✓ | DRAWN BY | ✓ | DART DART AEROSPACE LTD. HAMMERSLEY, ONTARIO, CANADA |
| CHECKED | ✓ | APPROVED | ✓ | DRAWING NO. D205-596-107 |
| DATE | 02.11.20 | TITLE | CROSSTUBE AFT EXTENDED | |
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| | | SCALE | | 1:10 |

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